

What is claimed is:

1. A hacksaw comprising:
 - an elongated blade having opposing longitudinal end portions with a cutting edge between the longitudinal end portions;
 - a frame including
 - a forward portion providing a first blade mount, one of the longitudinal end portions of the blade being removably mounted on the first blade mount,
 - a rearward portion including a manually engagable handle portion constructed and arranged to be manually grasped to enable performance of a cutting operation wherein the cutting edge of the blade is engaged with a workpiece and moves forwardly and rearwardly to cut the workpiece, the rearward portion providing an adjustment mechanism mounting structure, and
 - an intermediate portion interconnecting the forward portion and the rearward portion; and
 - a blade tension adjustment mechanism provided at the rearward end portion and including
 - a second blade mount configured to removably mount the other of the longitudinal end portions of the blade,
 - a lever operatively connected to the second blade mount and pivotally mounted to the adjustment mechanism mounting structure of the rearward portion, the lever constructed and arranged to be pivotally moved between (1) a blade tensioning position wherein the first and second blade mounts are moved relative to one another so as to tension the blade between the first and second blade mounts, and (2) a blade releasing position wherein the first and second blade mounts are moved relative to one another so as to release the tension from the blade and thereby allow removal and replacement of the blade, and
 - a lock slidably attached to the lever to slide between (1) a locked position wherein the lock secures the lever in the blade tensioning position, and (2) an unlocked position wherein the lock permits the lever to be pivoted relative to the rearward portion between the blade tensioning position and the blade releasing position.
2. The hacksaw according to claim 1, wherein the lever includes an adjusting member constructed and arranged to selectively move the second blade mount relative to the lever so as to selectively adjust the amount of tension being applied to the blade when the lever is in the blade tensioning position thereof.

3. The hacksaw according to claim 2, wherein the adjusting member is mounted between the lever and the arm.

4. The hacksaw according to claim 3, wherein the adjusting member includes an elongated shaft having a forward mounting portion and a rearward threaded portion, the mounting portion of the shaft being attached to the arm pivotally attached to the frame and threaded portion being slidably engaged with a pin mounted to the lever and threadably engaged with a manually engagable knob,

and wherein the knob can be manually rotated to adjust its position on the shaft, which adjusts the position of the pin on the shaft, thereby adjusting the distance between the arm and the lever.

5. The hacksaw according to claim 1, wherein the first and second blade mounts each include a post and the longitudinal end portions of the blade each have an aperture formed therethrough, the blade being removably mounted to the first and second blade mounts by inserting the posts through respective apertures.

6. The hacksaw according to claim 5, wherein the post of the second blade mount is provided on an elongated spring biased arm, the arm having one end pivotally mounted to the frame and an opposite end that provides the post.

7. The hacksaw according to claim 1, wherein the lever provides forwardly disposed mounting portions provided with projections and the adjustment mechanism mounting structure includes a pair of recesses, the projections of the lever being pivotally received in the recesses of the adjustment mechanism mounting structure to allow for pivotal movement of the lever with respect to the rearward portion.

8. The hacksaw according to claim 1, wherein the lever includes a track portion on opposing side walls and the lock includes an elongated recess on opposing side walls thereof, the track portion of the lever being received within corresponding recesses of the lock to allow the lock to slide along the lever between the locked position and the unlocked position.

9. The hacksaw according to claim 1, further comprising a biasing structure mounted between the lever and the lock to positively locate the lock in its locked and unlocked positions.

10. The hacksaw according to claim 9, wherein the biasing structure includes a spring attached to the lever that is operatively engaged with a ball so as to bias the ball into engagement with the lock, the lock including first and second recesses,

and wherein the ball is biased into engagement with the lock such that the ball engages within one of the first and second recesses provided in the lock to maintain the lock in the locked position and engages within the other of the first and second recesses provided in the lock to maintain the lock in the unlocked position.

11. The hacksaw according to claim 1, wherein the lock includes a generally upwardly facing engagement surface and the rearward portion of the frame includes a generally downwardly facing engagement surface, the engagement surface of the lock being in abutting engagement with the engagement surface of the rearward portion when the lever is in the blade tensioning position and the lock is in the locked position so that pivotal movement of the lever out of the blade tensioning position is prevented because the lock is prevented from movement with respect to the rearward portion, the lock being slidable from the locked position to the unlocked position to disengage the engagement surface of the lock from the engagement surface of the rearward portion to allow pivotal movement of the lever and lock with respect to the rearward portion of the frame.

12. The hacksaw according to claim 1, wherein the adjustment mechanism mounting structure provides a generally rearwardly facing load bearing surface and the lever provides a generally forwardly facing load transmitting surface that is engagable with the load bearing surface, the load bearing and load transmitting surfaces engaging one another in an abutting relationship when the lever is in the blade tensioning position so that at least a portion of the force applied to the lever is transmitted to and borne by the load bearing surface.

13. The hacksaw according to claim 1, wherein a length of a leverage arm utilized to pivot the lever from the blade tensioning position to the blade releasing position is increased when the lock is in the unlocked position so as to facilitate movement of the lever between the blade tensioning and blade releasing positions.

14. The hacksaw according to claim 1, further comprising a blade holder releasably attached to the intermediate portion of the frame, the blade holder having a spring loaded member structured to releasably secure one or more spare blades to the intermediate portion of the frame.

15. The hacksaw according to claim 14, wherein a pair of blade holders are utilized to releasably secure spare blades to the frame, one of the pair of blade holders releasably securing one end portion of the spare blades and the other of the pair of blade holders releasably securing the other end portion of the spare blades.

16. The hacksaw according to claim 14, wherein the blade holder includes a pair of resilient leg portions having cam portions, the frame engagable with the cam portions so as to flex the resilient leg portions outwardly away from one another thereby allowing the blade holder to move into a secured position onto the frame, the leg portions resiliently returning inwardly toward one another with a snap-action to secure the blade member in the secured position onto the frame.

17. The hacksaw according to claim 14, wherein the spring loaded member of the blade holder is biased in a direction towards the frame such that spare blades can be clasped between the spring loaded member and the frame.

18. A hacksaw comprising:

an elongated blade having opposing longitudinal end portions with a cutting edge between the longitudinal end portions;

a frame including

 a forward portion providing a first blade mount, one of the longitudinal end portions of the blade being removably mounted on the first blade mount,

 a rearward portion including a manually engagable handle portion constructed and arranged to be manually grasped to enable performance of a cutting operation wherein the cutting edge of the blade is engaged with a workpiece and moves forwardly and rearwardly to cut the workpiece, the rearward portion providing an adjustment mechanism mounting structure, and

 an intermediate portion interconnecting the forward portion and the rearward portion;

a blade tension adjustment mechanism mounted to the adjustment mechanism mounting structure of the rearward portion, the blade tension adjustment mechanism providing a second blade mount configured to removably mount the other of the longitudinal end portions of the blade; and

a blade holder releasably attached to the intermediate portion of the frame, the blade holder having a spring loaded member structured to releasably secure one or more spare blades to the intermediate portion of the frame.

19. The hacksaw according to claim 18, wherein the blade tension adjustment mechanism includes a lever operatively connected to the second blade mount and pivotally mounted to the adjustment mechanism mounting structure of the rearward portion, the lever constructed and arranged to be pivotally moved between (1) a blade tensioning position wherein the first and second blade mounts are moved relative to one another so as to tension the blade between the first and second blade mounts, and (2) a blade releasing position wherein the first and second blade mounts are moved relative to one another so as to release the tension from the blade and thereby allow removal and replacement of the blade

20. The hacksaw according to claim 19, wherein the blade tension adjustment mechanism includes a lock slidably attached to the lever to slide between (1) a locked position wherein the lock secures the lever in the blade tensioning position, and (2) an unlocked position wherein the lock permits the lever to be pivoted relative to the rearward portion between the blade tensioning position and the blade releasing position.

21. The hacksaw according to claim 20, wherein the lever includes an adjusting member constructed and arranged to selectively move the second blade mount relative to the lever so as to selectively adjust the amount of tension being applied to the blade when the lever is in the blade tensioning position thereof.

22. The hacksaw according to claim 21, wherein the adjusting member is mounted between the lever and the arm.

23. The hacksaw according to claim 22, wherein the adjusting member includes an elongated shaft having a forward mounting portion and a rearward threaded portion, the mounting portion of the shaft being attached to the arm pivotally attached to the frame and

threaded portion being slidably engaged with a pin mounted to the lever and threadably engaged with a manually engagable knob,

and wherein the knob can be manually rotated to adjust its position on the shaft, which adjusts the position of the pin on the shaft, thereby adjusting the distance between the arm and the lever.

24. The hacksaw according to claim 18, wherein the first and second blade mounts each include a post and the longitudinal end portions of the blade each have an aperture formed therethrough, the blade being removably mounted to the first and second blade mounts by inserting the posts through respective apertures.

25. The hacksaw according to claim 24, wherein the post of the second blade mount is provided on an elongated spring biased arm, the arm having one end pivotally mounted to the frame and an opposite end that provides the post.

26. The hacksaw according to claim 19, wherein the lever provides forwardly disposed mounting portions provided with projections and the adjustment mechanism mounting structure includes a pair of recesses, the projections of the lever being pivotally received in the recesses of the adjustment mechanism mounting structure to allow for pivotal movement of the lever with respect to the rearward portion.

27. The hacksaw according to claim 20, wherein the lever includes a track portion on opposing side walls and the lock includes an elongated recess on opposing side walls thereof, the track portion of the lever being received within corresponding recesses of the lock to allow the lock to slide along the lever between the locked position and the unlocked position.

28. The hacksaw according to claim 20, further comprising a biasing structure mounted between the lever and the lock to positively locate the lock in its locked and unlocked positions.

29. The hacksaw according to claim 28, wherein the biasing structure includes a spring attached to the lever that is operatively engaged with a ball so as to bias the ball into engagement with the lock, the lock including first and second recesses,

and wherein the ball is biased into engagement with the lock such that the ball engages within one of the first and second recesses provided in the lock to maintain the lock in the locked position and engages within the other of the first and second recesses provided in the lock to maintain the lock in the unlocked position.

30. The hacksaw according to claim 20, wherein the lock includes a generally upwardly facing engagement surface and the rearward portion of the frame includes a generally downwardly facing engagement surface, the engagement surface of the lock being in abutting engagement with the engagement surface of the rearward portion when the lever is in the blade tensioning position and the lock is in the locked position so that pivotal movement of the lever out of the blade tensioning position is prevented because the lock is prevented from movement with respect to the rearward portion, the lock being slidable from the locked position to the unlocked position to disengage the engagement surface of the lock from the engagement surface of the rearward portion to allow pivotal movement of the lever and lock with respect to the rearward portion of the frame.

31. The hacksaw according to claim 19, wherein the adjustment mechanism mounting structure provides a generally rearwardly facing load bearing surface and the lever provides a generally forwardly facing load transmitting surface that is engagable with the load bearing surface, the load bearing and load transmitting surfaces engaging one another in an abutting relationship when the lever is in the blade tensioning position so that at least a portion of the force applied to the lever is transmitted to and borne by the load bearing surface.

32. The hacksaw according to claim 20, wherein a length of a leverage arm utilized to pivot the lever from the blade tensioning position to the blade releasing position is increased when the lock is in the unlocked position so as to facilitate movement of the lever between the blade tensioning and blade releasing positions.

33. The hacksaw according to claim 18, wherein a pair of blade holders are utilized to releasably secure spare blades to the frame, one of the pair of blade holders releasably securing one end portion of the spare blades and the other of the pair of blade holders releasably securing the other end portion of the spare blades.

34. The hacksaw according to claim 18, wherein the blade holder includes a pair of resilient leg portions having cam portions, the frame engagable with the cam portions so as to flex the resilient leg portions outwardly away from one another thereby allowing the blade holder to move into a secured position onto the frame, the leg portions resiliently returning inwardly toward one another with a snap-action to secure the blade member in the secured position onto the frame.

35. The hacksaw according to claim 18, wherein the spring loaded member of the blade holder is biased in a direction towards the frame such that spare blades can be clasped between the spring loaded member and the frame.